REMARKS

Interview Summary

Applicant gratefully acknowledges the courtesy of Examiner Stein and his supervisory (primary) examiner in granting a telephone interview on December 7, 2005. In addition to the foregoing examiners, also present by telephone were the undersigned attorney, Chris Jenson (a current inventor) and engineer Laszlo Takacs, who is employed by Assignee Fiberstars, Inc. Applicant summarizes the substance of the interview as follows.

Claims 1 and 2 were discussed in connection with US Patent 6.714,711 B1 to Lieberman et al., mentioned by Examiner Stein in a telephone conference with the undersigned on or about November 14, 2005. Examiner Stein opined that the patent might potentially constitute a Sec. 102 or 103 reference against Claims 1 and 2. During the subsequent, Dec. 7 conference, the subject matter of the following three points was considered, although the following discussion may elaborate beyond the discussion at the interview:

1) Examiner Stein said that Claim 1 would be allowable over the Lieberman et al. reference if amended to include an element such as contained in Paragraph c) of Claim 3. Such a resulting subject matter has been presented as new Claim 30. As such, Claim 30 should be held allowable, as well as its dependent Claim 2.

2) Claim 1 has been amended to refer to "the core lacking any significant variation in refractive index along the longitudinal axis as measured without regard to the presence of the light-scattering material." This is to distinguish over the Lieberman et al. reference, which shows in Fig. 6—mentioned by Examiner Stein as the key figure—"a varying refractive index [in core 25], represented by the varying density lines 27." Col. 5, Lines 9-10. Liberman et al. require both a "varying refractive index" in the core, as the foregoing shows, as well as a varying distribution of scattering centers 28, as mentioned in Col. 5, Lines 18-21. These phenomenon are different from each other, as is apparent from their separate treatment in the specification of Liberman et al., as the following three, exemplary cites shows. First, the specification from Col. 1, Line 66 – Co. 2, Line 5 refers to the "invention being based on the realization that the characteristics of light transmitted through an optical fiber can be modified by changing, for example, the refractive index ratio [between core and clad]," without mention of the technique of using light-scattering centers in the core. Second, the next paragraph in the specification (Col. 2, Lines 6-10) then teaches that the foregoing technique can be combined with the technique of "inducing light scattering centers within the fiber core," underscoring that the two techniques are different. Third, the description in the

specification of Fig. 6 similarly refers to increasing the "refractive index *and* distribution of scattering centers" (Col. 5, Lines 18-21; emphasis added), thus again treating these two techniques as independent of each other.

In contrast, the invention of Claim 1 expressly avoids the necessity of varying the refractive index of the core. Liberman et al. therefore teaches away from the invention of Claim 1, and so Claim 1 and its dependent Claim 2 should be allowed.

3) Examiner Stein's supervisory (primary) examiner queried whether the substance of new Paragraph d) in Claim 1, discussed in the foregoing point, was supported by the application as originally filed. Applicant asserts that a person of ordinary skill in the art would find Paragraph d) as being inherently and inevitably taught by the application as filed, generally because the specification teaches that achieving side-light emission that is "uniform" (as defined in the specification) is accomplished by a single technique; that is, the technique of distributing light-scattering material along the longitudinal axis of the core with a non-zero density gradient. See, for instance, the specification at Page 6, Lines 13-18. The following three points a) – c) elaborate on this reasoning:

   a) It is customary in the art of fabricating light pipes to not significantly vary the refractive index of the core of the light pipe. Thus, a typical prior art patent would teach setting the refractive index of the core at one (i.e., constant) value. See, for instance, US Patent 5,845,038, which teaches a core of "substantially optically transmissive material" such as "polymethylmethacrylate (refractive index 1.49) and polycarbonate (refractive index 1.58)." Col. 7, Lines 37-42. Both of the foregoing refractive indexes are stated as constants (e.g., 1.49 or 1.58). This shows that typical light pipes have cores of constant refractive index along their length.

   b) The present specification and Claim Paragraph 1-d teach only the single technique of varying the distribution of light-scattering material along the longitudinal axis of the core to achieve side-light emission that is uniform. Accordingly, a person of ordinary skill in the art would be adequately taught to use that one technique for achieving uniform side-light emission.

   c) The foregoing conclusion is buttressed by the Point a) two paragraphs above, which shows that the refractive index of a core of a light pipe is normally constant. For this additional reason, a person of ordinary skill in the art would find Claim Paragraph 1-d especially well taught by the present specification.

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Conclusion

The pending claims should be allowed.

I certify that the foregoing document and any document(s) referenced below are being faxed to the above-mentioned recipient at the above-mentioned fax number on the date stated below.

Dated: December 15, 2005

Respectfully submitted,

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